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BEVER HOFFMAN & HARMS, LLP 901 CAMPISI WAY SUITE 370 CAMPBELL, CA 95008				GHEBRETINSAE, TEMESGHEN
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* WON-JOON CHOI, JEFFREY M. GILBERT,  
YI-HSIU WANG, and XIAORU ZHANG

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Appeal 2009-008312  
Application 10/664,792  
Technology Center 2600

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Before ROBERT E. NAPPI, CARL W. WHITEHEAD, JR., and BRADLEY W. BAUMEISTER, *Administrative Patent Judges*.

NAPPI, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

This is a decision on appeal under 35 U.S.C. § 134(a) of the rejection of claims 1 through 6.

We affirm.

## INVENTION

The invention is directed to a method for using wireless local area networks to improve receiver performance and avoid using bad pilots (signals in a predetermined pattern) by generating a pilot mask. See pages 1 and 6 Appellants' Specification. Claim 1 is reproduced below:

1. A method of improving receiver performance by avoiding bad pilots, the method comprising:

generating a pilot mask for immediate data communication use in the receiver based solely on analysis at the receiver,

wherein the pilot mask includes a set of flags, the set of flags associated with certain sub-channels,

wherein each flag in the set of flags determines whether its associated sub-channel is usable for pilot tracking, wherein at least one flag indicates its associated sub-channel is not usable for pilot tracking, thereby allowing the receiver to avoid a bad pilot.

## REFERENCES

Logvinov	US 2003/0231582 A1	Dec. 18, 2003
Goldstein	US 2004/0081076 A1	Apr. 29, 2004
Dollard	US 6,934,340 B1	Aug. 23, 2005

## REJECTIONS AT ISSUE

The Examiner has rejected claims 1 through 3, 5, and 6 under 35 U.S.C. § 103(a) as being unpatentable over Logvinov in view of Dollard. The Examiner's rejection is on pages 3 through 5 of the Answer.<sup>2</sup>

The Examiner has rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Logvinov in view of Dollard and Goldstein. The Examiner's rejection is on page 5 of the Answer.

## ISSUE

Appellants' arguments on pages 6 through 8 of the Brief<sup>3</sup> directed to the Examiner's rejection of claims 1 through 3, 5, and 6 presents us with the issue did the Examiner err in finding that Dollard teaches generating a pilot mask that can be used immediately for data communication based solely on analysis at the receiver?

## ANALYSIS

Appellants' arguments have not persuaded us of error in the Examiner's finding that Dollard teaches generating a pilot mask that can be used immediately for data communication based solely on analysis at the receiver. Appellants describe Dillard as a system in which an initial bit map is generated that identifies usable and un-useable sub-carriers based on an

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<sup>2</sup> Throughout this decision we refer to the Examiner's Answer dated October 14, 2008.

<sup>3</sup> Throughout this decision we refer to the Appeal Brief dated August 13, 2008, and Reply Brief filed December 4, 2008.

analysis at a first communications device. The first device performs an analysis of the subcarriers that are usable and un-useable at the first device, and uses this analysis to send an initial bit map of usable/un-useable subcarriers to a second communications device. The second device similarly performs an analysis of the subcarriers that are usable and un-useable at the second device, the second device then modifies the second bitmap if necessary and transmits either the modified bit-map or an ACK (if change to the bitmap is not necessary). After the second communication device sends the modified bit-map or ACK, the Dillard's system can commence data communication. Brief 7-8. We concur with the Appellants' description of Dollard.

Based upon this description of Dollard, Appellants argue the claimed invention is different from Dollard as the pilot mask (bitmap in Dollard) generated based on the analysis of only one receiver cannot be used immediately for data communication without input from another communication device. Brief 8. This argument has not persuaded us of error in the rejection. In rejecting this claim the Examiner has considered the initial bitmap as meeting the claimed pilot mask, as it is generated at a first device solely on analysis at the receiver. Answer 4, 6, 7. We concur with this finding by the Examiner. Further, we concur with the Examiner's finding on pages 4, 6, and 7 of the Answer that this bit map is for immediate data communication as it is used when transmitting the initial bit map to the second receiver. We find no limitation which differentiates the data transmission recited in claim 1 and the transmission of the initial bitmap (data) from the first device to the second device. Thus, Appellants' arguments have not persuaded of error in the Examiner's findings, as this is

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the only issue raised with respect to the rejection of claims 1 through 3, 5, and 6 under 35 U.S.C. § 103(a), we sustain this rejection.

**Claim 4**

On pages 9 and 10 of the Brief, Appellants argue that the additional teaching of Goldstein do not make up for the deficiencies noted in the rejection of independent claim 1. As such Appellants argue that the rejection of dependent claim 4 is similarly in error. As discussed above, Appellants' have not persuaded us of error in the rejection of independent claim 1, thus we are similarly not persuaded of error in the rejection of claim 4. Accordingly, we sustain the Examiner's rejection of claim 4.

**CONCLUSION**

Appellants' arguments have not persuaded us of error in the rejections of claims 1 through 6.

**ORDER**

The decision of the Examiner to reject claims 1 through 6 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

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AFFIRMED

ELD

BEVER HOFFMAN & HARMS, LLP  
901 CAMPISI WAY  
SUITE 370  
CAMPBELL, CA 95008